

in a radially outwardly and slightly upward manner from the upper end of the vertical feed passage 46, each feed passage 48 extending to the lower end of a respective one of the helical grooves 32. For clarity, only one of the feed passages 48 is shown. The base portion 28 of the mandrel 24 is bolted to the base portion 20 of the lower outer die member 12 by circumferentially spaced bolts 50 (only one of which is shown).

[0014] The base portion 28 of the mandrel 24 also has two circumferentially spaced vertical feed passages 47 extending from the bottom to the top thereof and radially spaced from the longitudinal axis A of the die for a purpose which will be described later.

[0015] A second mandrel 54 which is identical to the lower mandrel 24 is mounted on top of the lower mandrel 24 and is nested therein, ie. in stacking relationship therewith. The second mandrel 54 has a radially outwardly and upwardly extending sidewall 56 and a base portion 58. The outer surface of side wall 56 has a series of helical grooves 62 which co-operate with the inner surface 27 of the lower mandrel 24 to form radially outwardly and upwardly extending helical passages therebetween. As before, the helical groove 62 have multiple starts (not shown) at their lower ends. One of the vertical passage portions 42 of a feed passage 40 is radially spaced from the longitudinal axis A of the die (to the left thereof as seen in Fig. 1), and is aligned with one of the vertical passages 47 in the base portion 28 of the first mandrel 24.

[0016] The base portion 58 of the mandrel 54 also has a vertical feed passage 57 extending vertically from the bottom to the top thereof and radially spaced from the longitudinal axis A of the die and aligned with the other vertical passage 47 in the base portion 28 of the first mandrel 24, again for a purpose which will be described later.

[0017] The upper surface 60 of the base portion 28 of the first mandrel 24 has a groove 61 extending radially inwardly from the upper end of one of the vertical feed passages 47 to the longitudinal axis A of the die. The lower surface 64 of the base portion 58 of the mandrel 54 has a complementary groove 66 forming a horizontal passage 68 with the groove 62. At its radially outer end, the horizontal passage 68 communicates with the top of the relevant vertical passage 47, and at the longitudinal